

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-38 (canceled)

Claim 39 (withdrawn) A method of screening an agent for the ability to inhibit an activity of TTP, comprising the steps of:

- a) cotransfecting a cell with a nucleic acid that encodes TTP and a nucleic acid that comprises an ARE downstream of a nucleic acid sequence encoding a reporter protein;
- b) contacting the cell of step a) with the agent; and
- c) comparing the expression of the reporter protein in the cell of step b) to the cell of step a) in the absence of the agent, an increase in reporter gene expression in the cells of step b) compared to the cells of step a) indicating that the agent has the ability to inhibit an activity of TTP.

Claim 40 (withdrawn) A method of screening an agent for the ability to compete with TTP for binding to the ARE of mRNA, comprising the steps of:

- a) transfecting a cell with a nucleic acid that encodes TTP;
- b) obtaining a cytosolic extract of the cell of step a);
- c) contacting the cytosolic extract of step b) with the agent;
- d) contacting the cytosolic extract of steps b) and c) with a probe comprising an ARE;
- e) comparing the binding of the probe to TTP in the cytosolic extract of step b) with the binding of the probe to TTP in the cytosolic extract of step c), the presence of reduced

binding of the probe to TTP in the cytosolic extract of step c) indicating an agent that can compete with TTP for binding to the ARE of mRNA.

Claim 41 (withdrawn) A method of stimulating the degradation of an mRNA molecule having an AU-rich element (ARE), comprising contacting the mRNA molecule with a tandem zinc finger (TZF) polypeptide consisting essentially of the tristetraprolin (TTP) zinc finger domain or comprising a TTP-like zinc finger domain, thereby stimulating degradation of the mRNA molecule.

Claim 42 (withdrawn) The method of claim 41, wherein the TTP-like zinc finger domain is selected from the ERF1 zinc finger domain, the ERF2 zinc finger domain, and the XC3H-4 zinc finger domain.

Claim 43 (withdrawn) The method of claim. 41, wherein the TZF polypeptide is selected from ERF1, ERF2, and XC3H-4.

Claim 44 (withdrawn) The method of claim 41, wherein the mRNA molecule is within a cytosolic extract.

Claim 45 (withdrawn) The method of claim 41, wherein the mRNA molecule is within a cell.

Claim 46 (withdrawn) The method of claim 41, wherein the mRNA molecule is within a patient or subject.

Claim 47 (withdrawn) The method of claim 41, wherein production of a polypeptide encoded by the mRNA molecule is decreased.

Claim 48 (withdrawn) The method of claim. 41, wherein the mRNA molecule encodes TNF- α .

Claim 49 (withdrawn) The method of claim. [[46]] 47, wherein the polypeptide is TNF- α .

Claim 50 (withdrawn) The method of claim. 41, wherein the TZF polypeptide is administered to a patient or subject to treat, inhibit, or prevent a TNF- α -related disease or condition in the patient or subject.

Claim 51 (withdrawn) The method of claim. 41, wherein a nucleic acid encoding the TZF polypeptide is administered to a patient or subject to treat, inhibit, or prevent a TNF- α -related disease or condition in the patient or subject.

Claim 52 (withdrawn) The method of claim. 41, wherein the ARE is a class II ARE.

Claim 53 (currently amended) A method of identifying a compound that modulates the ~~activity~~ binding of a tristetraprolin (TTP) TTP or a TTP-like polypeptide to an AU-rich element (ARE), comprising:

- a) contacting a sample containing the TTP or the TTP-like polypeptide and an ARE with the compound, and
- b) detecting or measuring the binding between ~~an~~ the ARE and TZF the TTP or the TTP-like polypeptide ~~consisting essentially of a TTP zinc finger domain or a polypeptide comprising a TTP-like zinc finger domain in the sample~~, whereby an increase or decrease in the binding between the ARE and the polypeptide, relative to the binding between the ARE and the polypeptide in the ~~sample not contacted with~~ absence of the compound, identifies a compound that modulates the ~~activity~~ binding of TTP or a TTP-like polypeptide to an ARE.

Claim 54 (currently amended) The method of claim ~~[[52]]~~ 53, whereby an increase in the binding between the ARE and the polypeptide identifies a compound that stimulates ~~the~~ an activity of a TTP or a TTP-like polypeptide.

Claim 55 (currently amended) The method of claim [[52]] 54, wherein the method identifies a compound that stimulates degradation of an mRNA molecule comprising an ARE.

Claim 56 (currently amended) The method of claim. [[52]] 55, wherein the mRNA molecule encodes tumor necrosis factor- α (TNF- α) ~~TNF- α~~ .

Claim 57 (currently amended) The method of claim [[52]] 53, whereby a decrease in the binding between the ARE and the ~~TZF~~-polypeptide identifies a compound that inhibits ~~the~~an activity of TTP or a TTP-like polypeptide.

Claim 58 (currently amended) The method of claim [[52]] 57, wherein the method identifies a compound that inhibits degradation of an mRNA molecule comprising an ARE.

Claim 59 (currently amended) The method of claim. [[52]] 55, wherein the mRNA molecule encodes granulocyte-macrophage stimulating factor (GM-CSF) ~~GM-CSF~~ or IL-3.

Claim 60 (currently amended) The method of claim [[52]] 53, further comprising contacting the sample with an inhibitor of mRNA transcription prior to detecting or measuring the binding between the ARE and the ~~TZF~~-polypeptide.

Claim 61 (currently amended) The method of claim [[52]] 53, wherein the ARE is a class II ARE.

Claim 62 (withdrawn) A method of identifying a compound that mimics the activity of TTP or a TTP-like polypeptide, comprising:

- a) contacting a first sample comprising an RNA molecule comprising an ARE with a compound;

- b) contacting a second sample comprising an RNA molecule comprising an ARE with the compound and with a saturating amount of a TZF polypeptide consisting essentially of a TTP zinc finger domain or comprising a TTP-like zinc finger domain;
- c) detecting or measuring degradation of the RNA molecule or binding of the compound to the ARE in the first sample and in the second sample;
- e) comparing the degradation or binding in the first sample to the degradation or binding in the first sample not contacted with the compound; and
- f) comparing the degradation or binding in the first sample to the degradation or binding in the second sample, whereby an increase in degradation or binding in the first sample contacted with the compound relative to the sample not contacted with the compound, and lack of an increase in degradation or binding in the second sample contacted with the compound and with the saturating amount of a TZF polypeptide, identifies a compound that mimics the activity of TTP or a TTP-like peptide.

Claim 63 (withdrawn) The method of claim. [[61]] 62, wherein the ARE is a class II ARE.

Claims 64-69 (canceled)

Claim 70 (new) A method of identifying a compound that modulates the binding of a tandem zinc finger (TZF) polypeptide to an AU-rich element (ARE), comprising:

- a) contacting a sample containing the TZF polypeptide and the ARE with the compound,
and
- b) detecting or measuring the binding between the ARE and the TZF polypeptide,
whereby an increase or decrease in the binding between the ARE and the polypeptide,
relative to the binding between the ARE and the polypeptide in the absence of the

compound, identifies a compound that modulates binding of TZF polypeptide to an ARE.

Claim 71 (new) The method of claim. 58, wherein the mRNA molecule encodes TNF- α .

Claim 72 (new) The method of claim. 58, wherein the mRNA molecule encodes GM-CSF or IL-

3.